Objectives

- Collaborative Project: Using 21st century software and hardware teachers will team-build a mechanical device made of multiple parts. The project (device) is unknown to the attendees until the first day of the workshop. Teams will communicate ONLY by remote, electronic methods; no face to face communication between teams.
- Design/build basics: From set design criteria/parameters, model on the computer and then physically manufacture the model using various output tools: laser cutting, CNC machining, 3D printing.
- Modeling basics: Tips and Tricks with CAD and CAM software. Topic: STEM is here to stay. What is it and where is it in your classroom? How do we include and prepare females for non-traditional careers? How do you differentiate instruction for special education students?
- The entire week is about the design and build process that is used in industry. This process creates opportunities for our students (this week our teachers) to work in collaborative, team environment. This environment is prevalent in all of our industries today. Students will work on the ability to assess, diagnose, decide, create, perform, and evaluate with as close to 100% accuracy as possible. These are the skills behind the non-traditional crafts, professions, and jobs.

1. The extent to which the written objectives have been met. 4
2. Participant perception of relevance and quality of the inservice. 5
3. The extent to which the following activities addressed by the inservice have been met:
   a. Opportunities for participants to collect and analyze evidence related to student learning. 3
   b. Professional certificate standards. 3
   c. School and district improvement efforts. 3
   d. K-12 frameworks and curriculum alignment. 4
   e. Research-based instructional strategies and assessment practices. 4
   f. Content of current or anticipated assignment. 5
   g. Advocacy for students and leadership, supervision, mentoring/coaching. 4
   h. Building a collaborative learning community. 5

Suggestions for improving the inservice: NONE